Orange County Natural Areas Inventory

SEVENMILE CREEK SUGAR MAPLE BOTTOM
Updated 2004

Site Number: E06 **Size:** 88 acres
Site Significance: Regional **USGS Quadrangle:** Efland

SIGNIFICANT FEATURES: This is the richest bottomland remaining in the county. All other rich, basic bottomlands along upland streams have been brought under cultivation. Nowhere else occurs such a large stand of southern sugar maple (*Acer barbatum*), hackberry (*Celtis laevigata*), and swamp chestnut oak (*Quercus michauxii*). The most important value of this site, however, is the amazingly profuse herb layer. Particularly impressive are the large patches of such regionally rare species as maidenhair fern (*Adiantum pedatum*) and blue cohosh (*Caulophyllum thalictroides*); this is, in fact, the only known site for the blue cohosh in Orange County and much of the surrounding Piedmont. Two other state-listed plants also found here are ginseng (*Panax quinquefolius*), which is documented from only five sites in the county, and purple fringeless orchid (*Platanthera peramoena*), which has been documented only at this site within the county; (however not re-verified in 2001 because permission to access site was not granted by landowner).

The creek also possesses a well-developed fish and freshwater mussel fauna, including the notched rainbow mussel (*Villosa constricta*), a state-listed species. River otter (*Lutra canadensis*) and red-shouldered hawk (*Buteo lineatus*), two regionally rare species, are also present.

NATURAL COMMUNITIES: Basic Mesic Forest

GENERAL DESCRIPTION: Most of the natural area is on the southeast side of the creek, but also included on the northwest side is a mucky drainage ditch containing the purple fringeless orchid (*Platanthera peramoena*). Several of the prime features of this site are associated with its topographic occurrence as a narrow bottomland located within an upland stream valley. The deep and rich circumneutral soil is the result of a long, gentle alluvial deposition on the floodplain and lower slopes, and the richness and depth of this soil in turn are responsible for the outstanding growth of plant life. The trees illustrating the lush condition of the bottomland include southern sugar maple (*Acer barbatum*), swamp chestnut oak (*Quercus michauxii*), hackberry (*Celtis laevigata*), black walnut (*Juglans nigra*), and shagbark hickory (*Carya ovata*), while the shrub layer is likewise composed of such basophilic species as bladdernut (*Staphylea trifolia*), redbud (*Cercis canadensis*), spicebush (*Lindera benzoin*), and hazelnut (*Corylus americana*). By 2001, much of the northeastern portion of the site, including where the blue cohosh and ginseng grow, had suffered from hurricanes and many canopy and understory trees had blown down. That has created areas of treefalls and abundant new saplings, making passage difficult.

The basic pH of the soil together with the cool, moist conditions provided by the lengthy north-facing lower portion of the slope (which is directly adjacent to the floodplain and thus receives occasional alluvial deposition), also accounts for the rich herbaceous flora. Particularly noteworthy is the large growth of blue cohosh (*Caulophyllum thalictraides*), a